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CIVIL ENGINEER CONTINGENCY RESPONSE PLANNING

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFPD 10-2, *Readiness* and interfaces with AFI 10-210, *Prime Base Engineer Emergency Force (BEEF) Program*. This instruction gives the directive requirements for civil engineer unique contingency response planning. It helps civil engineers plan initial responses to enemy actions, major accidents, natural disasters, civil disorders, and other contingencies. See attachment 1 for explanation of terms used in this instruction. Attachment 2 provides additional guidance and suggestions on preparing and packaging the contingency response plan.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

This revision reformats the information presented in the individual chapters, reformats the civil engineer contingency response plan to the support format used for Base Oplan 32-1, and places all training and exercise requirements into a single chapter.

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RESPONSIBILITIES

1.1. Headquarters US Air Force (HQ USAF):

- 1.1.1. HQ USAF/ILE. The Air Force Civil Engineer is responsible for all civil engineer (CE) contingency response programs and policy.
- 1.1.2. HQ USAF/ILEO. The Chief, Operations Division establishes general civil engineer contingency response policy.
- **1.2. HQ Air Force Civil Engineer Support Agency.** The Directorate of Contingency support (HQ AFCESA/CEX) **e**stablishes standards, procedures, guidelines, and instructions relating to civil engineer contingency response. HQ AFCESA/CEX serves as the focal point for the civil engineer contingency response guidance and Air Force instructions.
- **1.3. Major Commands (MAJCOM).** MAJCOMs give specific guidance and assistance to subordinate commands or installations, monitor contingency response programs at all subordinate levels, evaluate CE contingency response capabilities during staff visits and inspector general (IG) inspections, and review contingency response training programs for compliance with Air Force Policy Directives and this instruction.
- **1.4. Base Civil Engineer/CE Unit Commander.** Units will establish a CE contingency response plan and maintain contingency response capabilities to restore operations, save lives, mitigate human suffering, and minimize damage during and after a crisis occurring on or near the installation. The Base Civil Engineer (BCE) provides trained forces and uses available equipment and materials to return the installation quickly to a condition where the primary mission can be executed.
 - 1.4.1. The BCE ensures the CE contingency response plan is consistent with AFI 32-2001, The *Fire Protection Operations and Fire Prevention Program;* AFI 32-4001, *Disaster Preparedness Planning and Operations; Base Operations Plan* (OPlan) 32-1, and other installation emergency support and war plans.
 - 1.4.2. The BCE and his or her staff advises the installation commander and other concerned installation officials on all recovery operations of base facilities.

CONTINGENCY RESPONSE PLANNING AND PREPARATIONS

- **2.1. Peacetime Planning.** Each civil engineer organization must plan for and exercise contingency responses to ensure it can respond effectively to emergencies. BCEs must prepare clear and useful contingency response plans and keep them current.
 - 2.1.1. Civil Engineer Contingency Response Plan. Crises, hostile actions, and natural disasters are often unpredictable and always full of the unexpected. Advance planning reduces the chaos and hastens effective contingency response. The unpredictable nature of contingencies requires that response procedures be developed in advance to ensure continuity of Air Force operations during and after a disaster.
 - 2.1.1.1. Plan Objective. The main objective of any CE contingency response plan is to provide guidance and information so that civil engineers respond quickly and effectively to all contingencies, and in doing so, maintain or help to restore the installation's operational capability to meet its wartime or peactime missions. Good planning and periodic training mitigate confusion inherent in initial responses to accidents, disasters, war, etc. The CE contingency response plan must include provisions for:
 - 2.1.1.1.1. Emergency and follow-on repair of facility damage caused by natural disaster, sabotage, war, etc.
 - 2.1.1.1.2. Force beddown.
 - 2.1.1.1.3. Operations and maintenance of facilities and installations during contingencies.
 - 2.1.1.1.4. Aircraft and facility fire protection and rescue.
 - 2.1.1.1.5. Safe rendering and removal of hazardous munitions and counter terrorism support.
 - 2.1.1.1.6. Managing Air Force contracts for war damage repairs and force beddown.
 - 2.1.1.2. Basic Content. The CE contingency response plan will contain, as a minimum, a table of contents, basic plan, and annexes. The recommended format is at attachment 2. More definitive guidance for developing this plan is provided in AFPAM 10-219, vol 1, *Contingency and Disaster Planning*.
 - 2.1.1.3. Continental United States (CONUS) Requirements. At CONUS active duty bases, the CE contingency response plan must include provisions for responding to situations both with and without the BCE's deployable Prime BEEF resources (AFI 10-210). The CE's remaining work force, without contractor supplementation or other augmentation, must be trained to initially support critical mission-sustaining requirements and to operate and maintain essential base functions during both wartime operations and peacetime disasters.
 - 2.1.1.4. Theater Requirements. At overseas theater locations, civil engineers must include provisions for responding to situations both with and without their deployable Prime BEEF resources and CONUS Prime BEEF augmentation forces. Civil engineers may include other in-theater augmentation forces, such as Army engineer units, assured host nation support, and locally available civilian and contractor support.

- 2.1.2. Other Plans. CE provides contingency support to numerous other operations plans (see AFPAM 10-219, vol 1, chap 3). These support requirements, as well as the requirements other organizations provide to civil engineers, need to be documented in the CE contingency response plan.
- 2.1.3. Environmental Protection. The BCE ensures contingency response operations and training activities comply with the environmental laws and standards as described in AFPD 32-70, *Environmental Quality;* AFI 32-4002, *Hazardous Material Emergency Planning and Response Compliance;* and AFH 10-222, *Environmental Guide for Contingency Operations*. The BCE evaluates environmental concerns during contingency response activities in accordance with AFI 32-7061, *Environmental Impact Analysis Process*. HQ USAF/ILEV must approve deviations to the environmental impact analysis process, special or emergency conditions notwithstanding.
- 2.1.4. Back Filling Deployed Prime BEEF Positions. Establish guidelines and procedures to ensure mission-essential work is accomplished if any or all civil engineer mobility forces deploy. Plan to efficiently receive and employ backfill personnel, if needed, when Prime BEEF mobility personnel deploy in support of major contingency operations. CE must:
 - 2.1.4.1. Identify and prioritize all mission-essential tasks that backfill forces must perform (for example, sewage, water and heat plant operations; emergency service call operations; disaster preparedness; EOD; fire protection; etc.).
 - 2.1.4.2. Quantify the expected voids in the work force when unit mobility teams deploy. Indicate which voids the Air Force Contract Augmentation Program (AFCAP) can fill, and which will require active or reserve military backfill.
 - 2.1.4.3. Identify all mission-essential tasks that require special licenses and certifications (for example, water plant operations, industrial waste plant operations, fire protection, barrier operations, etc.).
 - 2.1.4.4. Address the use of non-deployed active duty base personnel and key or emergency-essential civilian members to support the installation's mission.
 - 2.1.4.5. List all Reserve Forces units located on or near the base who could serve as candidates to rapidly backfill mission-essential positions.
 - 2.1.4.6. List the minimal training requirements for the CONUS sustaining back fill program to ensure that augmenting personnel are familiar with the base's equipment and operations.
 - 2.1.4.7. List all contractors in the vicinity of the base who could rapidly back fill mission essential functions.
- 2.1.5. Memorandums of Agreement (MOAs). Establish MOAs with local authorities for fire protection and EOD support, as available and advantageous to the Air Force, to enhance base capabilities. List these agreements with POCs in the contingency response plan.
- **2.2. Predisaster and Preattack Preparations.** Good predisaster preparations can save lives and reduce property damage resulting from accidents, disasters, and war. Such preparations effectively protect key resources while minimizing cost, labor, and materials. Some preparations can and should be made in peacetime. Each CE unit, as part of a base effort, should complete these tasks in peacetime or make plans to complete them in priority order when disasters threaten. Include provisions for expedient preparations in the CE contingency response plan. Examples of predisaster preparations include:

- 2.2.1. Vulnerability Reduction. Assist base organizations in identifying and programming requirements to reduce vulnerability of critical base facilities, equipment, and personnel. Site-specific risk assessments should be accomplished to identify resources to be protected and the level of protection to be afforded. CE should:
 - 2.2.1.1. Identify all facilities on the base that could be used as shelters to protect personnel, equipment, and weapons from nuclear weapons effects, conventional weapons damage, chemical and biological warfare agents, and natural disasters (see AFMAN 32-4005, *Personnel Protection and Attack Actions*). Determine the capacity for each shelter and list them in the CE contingency response plan.
 - 2.2.1.2. Consider redundancy when designing or redesigning critical utility systems and identify facilities that can be used as substitutes if prime facilities are destroyed.
 - 2.2.1.3. Consider hardening command posts, access and perimeter gates, utility generating plants, and mission essential shelters during initial construction or renovation of existing facilities.
 - 2.2.1.4. Survey and identify dispersal sites on and off base that meet security, access, and service requirements for storing essential resources and decrease vulnerability from a single-point attack or natural disaster. Include background data on the dispersal sites as part of the BCE CRP.
 - 2.2.1.5. Consider Camouflage, Concealment, and Deception (CCD) measures for key facilities and systems. (See AFI 32-4007.)
 - 2.2.1.6. Develop physical protection against terrorist activities. The security forces should identify requirements.
 - 2.2.1.7. Provide design, labor, equipment, and materials to help base organizations install and repair bunkers and revetments in threat areas to protect personnel, equipment, and weapon systems from the effects of a conventional attack.
- 2.2.2. Communications-Computer Systems. Work with base communications to provide installation primary and redundant warning systems and communications among the primary and alternate Wing Operations Centers (WOC), Survival Recovery Centers (SRC), CE Damage Control Centers (DCC), and the Fire Alarm Communications Center. Establish manual procedures, such as the use of runners or signal flags, to use during disruptions in message traffic and develop procedures for collecting information on damage to facilities, utilities, and pavements.
- 2.2.3. Emergency and Backup Utilities. Reestablish utilities or provide backup systems just after an attack or disaster. The CE contingency response plan should contain alternate sources of utility services for critical facilities.
 - 2.2.3.1. Firefighting and contamination control operations require a great amount of water. The contingency response plan should identify all available water sources, both on and nearby off base.
 - 2.2.3.2. Electrical power should be continuous to essential base functions. CE must have emergency-essential backup power sources when primary service to these essential functions or facilities is disrupted.
 - 2.2.3.3. CE must identify alternate or emergency waste disposal methods.

- 2.2.4. Environmental Hazard Reduction. Provide trained personnel or contractors and available equipment and materials to help the Base Spill Response Team with containment, cleanup, and site restoration for hazardous substance spills.
- 2.2.5. Utility System Isolation. Place accurate utility distribution system drawings showing locations of all cutoff valves and switches in the CE DCC and Fire Alarm Control Center. Locate and close the valves and switches periodically to make sure they work.
- 2.2.6. Support for Others. Plan for the following support requirements:
 - 2.2.6.1. Provide labor and equipment to assist the mortuary officer in preparing temporary cemeteries and mass burials sites for contaminated and non-contaminated remains.
 - 2.2.6.2. Assist base in developing unit casualty and damage reporting procedures.
 - 2.2.6.3. Assist the tactical deception officer with developing plans for CCD. Providing designs and maps to help units with placement of CCD items.
 - 2.2.6.4. Prepare a master standard grid map or maps for base command and control disaster response forces and damage assessment teams and airfield surface maps for minimum operating strip (MOS) selection teams. Put copies of all maps in primary and alternate SRCs and DCCs.
 - 2.2.6.5. Provide labor to assist in the base's annual assessment of the hazardous chemicals it regularly uses, stores, or ships.
- **2.3. Post Disaster Tasks.** CE must ensure the installation has a rapid response capability to continue or immediately regenerate essential air base functions after a disaster or attack by clearly identifying post disaster tasks in the CE contingency response plan. Instructions must describe the tasks in terms of what, who, where, how, when, and in what priority. The post disaster planning must cover specific tasks to meet requirements in these areas:
 - 2.3.1. Damage and Hazard Assessment. Quick initial reconnaissance to allow assessment of the installation following a natural or man-caused disaster or attack is a key part of recovery.
 - 2.3.1.1. Initial Unit Assessments and Reports. Following a natural or man-caused disaster or attack, CE and all base personnel should promptly report facility damage, casualties, suspected contamination, location of UXO, and other problems to the WOC or SRC through their respective control centers. The WOC or SRC directs efforts of the recovery teams accordingly.
 - 2.3.1.2. Detailed Assessment. CE must dispatch pre-identified and trained damage assessment teams following a natural or man-caused disaster or attack. The teams immediately perform assessments of airfield pavement to determine the greatest potential for rapidly restoring launch and recovery capabilities; identify and evaluate critical facility, utility, and communications repair requirements; and coordinate on-scene recovery activities with the WOC or SRC and the CE DCC.
 - 2.3.2. Firefighting and Crash Rescue. The primary role of the fire department during and just after an emergency is to rescue survivors, keep loss of life to a minimum, and extinguish or prevent the spread of fire. Firefighters may assist in area contamination control procedures, after they have accomplished required mission responsibilities, such as emergency responses and fire protection stand-by requirements. The firefighter's role in area contamination control is limited to using fire vehicles as

directed by the wing or base commander. Contingency response planning for firefighting must address worst-case scenarios.

- 2.3.3. Search and Rescue. Search and rescue operations may be crucial during disasters. Firefighters and other rescue personnel must be trained in first aid and equipped with necessary first aid supplies and equipment. Accessibility to the site of major aircraft accidents that occur off base may require CE to furnish heavy equipment and personnel. Most tactical and cargo aircraft carry explosive cartridge actuated devices (CAD) or payload actuated devices (PAD) which require safing by trained EOD personnel. These devices and carried ordnance require closely coordinated efforts between EOD and firefighters.
- 2.3.4. Hazard Clearance. CE must begin removing debris from aircraft operating areas, primary streets, and base areas as soon as possible after damage has occurred. Following a conventional bomb attack, engineers may begin removing debris before removing all UXO. Certain aircraft recovery operations will require special responses, such as carbon fibers and radioactive materials, requiring individual response plans within one of the annexes.
 - 2.3.4.1. UXO Safing and Clearance. CE provides EOD teams to identify, render safe, destroy, or remove hazardous explosive ordnance.
 - 2.3.4.2. Utility Hazard Isolation. CE isolates ruptured utility distribution systems to minimize the hazards to contingency response.
- 2.3.5. Emergency Utilities. CE must reestablish or substitute essential utilities quickly after an attack or disaster.
- 2.3.6. Beddown. CE should provide beddown assistance to deploying forces and disaster victims, when required. CE must identify existing facilities or potential cantonment areas, potable water sources, electricity, latrines, showers, refuse collection and disposal that can be used for expedient beddown operations.
- 2.3.7. Rapid Runway Repair. Following an enemy attack, CE must be capable of rapidly restoring damaged runways, taxiways, aircraft parking, and other airfield pavement. To ensure this capability, CE must have adequate equipment and supplies.
 - 2.3.7.1. Threat. Theater MAJCOMs must evaluate the specific regional threat to determine the rapid runway repair (RRR) set requirements and the appropriate levels of war reserve materiel such as crushed stone, AM-2 and folded fiberglass matting, and spall repair components for each base. (See AFPAM 10-219, vol 4, *Rapid Runway Repair*, for specific guidance on RRR sets and capabilities.)
 - 2.3.7.2. RRR Assets. RRR sets increase the crater repair capability at selected main operating bases where they are prepositioned. These sets generally are located at bases vulnerable to attack but may be deployed to other sites, if required.
- 2.3.8. Contamination Monitoring and Control. After any attack or disaster that may involve nuclear, biological, or chemical (NBC), the detection and hazard prediction of contamination must take place. Pre-identify equipment, materials, and personnel for this function. Coordinate with medical bio-engineering for assistance with water sources. Identify timing and any limitations to the base leadership. The detection and prediction will determine actions required for contamination avoidance, control, and decontamination. CE must remove or neutralize NBC contaminants on a priority basis so essen-

tial operations can resume and vital facilities can reactivate. (See AFI 32-4001, *Disaster Preparedness Planning and Operations*, for guidance on the base nuclear, biological, and chemical program.)

- 2.3.8.1. Limited Area Decontamination. CE must provide trained and equipped personnel to perform limited area contamination control, for roads, grounds, buildings, facilities, aprons, taxiways, and runways. Pre-identify equipment, materials, and personnel for this function. Identify limitations to the base leadership.
- 2.3.8.2. Vehicle Decontamination. Vehicle contamination control is a transportation responsibility; however, CE must have operating procedures available for decontaminating civil engineering critical vehicles. In coordination with transportation, pre-identify sites, equipment, materials, and personnel needed for control and collection of runoff.
- 2.3.9. Work Party Defense. The BCE must provide organic civil engineering work party defense and convoy security to ensure the success of contingency operations.
- 2.3.10. Base Denial. Base denial is an overseas theater task. It can become an engineer task when the theater commander directs base evacuation and the destruction of select air base systems, military equipment, and supplies. The BCE must prepare in advance a list of candidate targets. Denial of air base infrastructure, for the large part, will come under civil engineer. The BCE has numerous options available to effect denial operations without having to rely on the use of demolition experts. However, the BCE must maintain the capability in manpower and equipment to carry out denial operations using explosives and EOD specialists.
- 2.3.11. Support Tasks. When a disaster is the result of a bombing or missile attack, CE will:
 - 2.3.11.1. Provide persons trained on minimum operating strip (MOS) selection procedures to plot and evaluate all information received from damage assessment teams. Personnel will record runway and taxiway damage on airfield surface maps located within the primary and alternate SRCs and DCCs.
 - 2.3.11.2. Furnish EOD personnel and other civil engineering members trained in explosive ordnance recognition and bomb damage assessment to survey and identify all surfaces affecting the launch and recovery of aircraft and report findings to the SRC.
 - 2.3.11.3. Provide EOD teams to identify, render safe, destroy, or remove hazardous explosive ordnance.
 - 2.3.11.4. Provide labor and equipment to remove unexploded ordnance that EOD personnel have rendered safe and the SRC has designated for removal.

CE CONTINGENCY RESPONSE TEAMS

- **3.1. Command and Control.** The BCE must ensure effective contingency response command and control during an emergency.
 - 3.1.1. The CE contingency response force consists of many specialized teams and varies in organization and size from base to base, depending on a base's mission and threat condition. BCEs must organize these teams based on the specific needs of their base.
 - 3.1.2. CE contingency response procedures must include assembly instructions, communication links, and sufficient guidance to allow each team to initially function on its own.
 - 3.1.2.1. Assembly instructions must be detailed. They must include who reports where, when, to whom, and with what equipment. Assembly procedures should have a realistic goal. For example, the mobile teams should be 50 percent manned within 2 hours, 75 percent manned within 3 hours, and 100 percent manned within 4 hours. Test recall procedures quarterly.
 - 3.1.2.2. Alternate means of notifying personnel (if telephones are out of order and there is no electricity) must be practiced. Ensure the Pyramid Alerting System works well.
- **3.2. CE Contingency Response Structure.** The only effective response to contingencies, emergencies, and disasters is a trained military and civilian force that can draw on an adequate supply of equipment and materials. If the base is identified to maintain a rapid runway repair (RRR) and a rapid utility repair (RUR) capability, formation and manning of specialized RRR and RUR teams must receive a high priority.
 - 3.2.1. Mobility Forces. The Air Force maintains a number of standard military Prime BEEF mobility elements and teams in the United States to meet essential wartime requirements with rapid, short notice deployments to anywhere in the world. (See AFI 10-210.) These teams will be available for other contingency response taskings when not deployed or alerted for deployment.
 - 3.2.2. Base Sustaining Forces. Civil engineer forces, both military and civilian, must operate and maintain essential base functions in support of wartime requirements. Base planners must ensure that mission-essential base sustaining forces and equipment are available to support all essential base functions during wartime and after mobility force deployment.
 - 3.2.2.1. Although there are some base-level military positions essential to the war effort that civilians cannot logically backfill, the objective is for base-level CE sustainment forces to be primarily civilian.
 - 3.2.2.2. The BCE must ensure that essential base sustaining mission requirements are satisfied and that the base will continue its support of the wartime effort. When lacking sufficient civilian authorizations to fulfill base sustaining requirements, the BCE requests AFCAP, individual mobilization augmentee (IMA), Air Force Reserve or Air National Guard volunteer support. Once mobilized, Air Reserve Component (ARC) personnel augment the wartime force to accomplish essential tasks.

3.2.2.3. When requiring engineering assistance beyond that available on base, the BCE must consider using active and reserve component RED HORSE and mobile Prime BEEF forces, Army engineer units, host nation support forces, contractors, and staffing assistance.

- **3.3. Military Personnel.** The BCE may assign all military personnel to contingency response teams. However, Prime BEEF personnel assigned mobility UTC positions or required for other operational plans that are in effect may not be available for contingency response taskings.
- **3.4. Civilian Personnel.** The civilian work force is an integral and essential part of the CE contingency response force. When Prime BEEF forces deploy during contingency or natural disasters, the civilian force augments any remaining military force or assumes full responsibility for base recovery operations.
 - 3.4.1. The BCE may obtain essential manpower support for contingency response needs in several ways. These options include designated civilians; other volunteer, BCE-assigned civil service personnel; temporary overhires; AFCAP; local contractors; and other Department of Defense (DoD) civil service employees.
 - 3.4.2. The BCE designates civilian positions in each CE functional area required for the contingency response force. Position descriptions for these designated functional positions must include contingency response duties and responsibilities. The BCE must fully brief and train the civilian force on wartime or peacetime disaster responsibilities that are different from those encountered in their day-to-day, peacetime job.
 - 3.4.3. Civilian personnel should participate in training exercises. Their ability to perform contingency duties in a crisis largely depends on the experience they gain in training exercises. When they perform contingency response duties or take part in exercises during other than normal duty hours, employees may be entitled to additional pay.
 - 3.4.4. Additional Air Force civilian personnel may be made available from other bases within the command to fill critical contingency manpower shortfalls where position descriptions possess the necessary contingency skills and mobility stipulation.
 - 3.4.5. Local contractors may be needed to support the contingency response operation when CE lacks personnel possessing certain skills or specialized pieces of equipment. Even though the appropriate contracting office must execute any formal agreements with local contractors, identify these potential contract sources in the CE contingency response plan.

TRAINING AND EXERCISES

- **4.1. Training Philosophy.** Mission success in the CONUS and all theaters of operation during any type of contingency depends upon the effectiveness of individual and unit training. CE personnel must train as nearly as possible the way they expect to function during contingency or wartime. Their training must be comprehensive and realistic. CE must train for all conceivable missions in all kinds of weather and climate; they must train for the full spectrum of contingencies from major disasters to military operations other than war to theater regional war to chemical, biological, or nuclear war.
- **4.2. Personnel Training.** Trained personnel are essential for the success of the CE contingency response plan. Prime BEEF mobility training requirements are specified in AFI 10-210, chapter 3.
 - 4.2.1. Contingency Response Training. Overseas and CONUS civil engineer personnel and augmentees will be trained and equipped in the duties they will perform during alerts and contingency conditions.
 - 4.2.2. Prime BEEF Mobility Training. Prime BEEF mobility training requirements are specified in AFI 10-210, chapter 3.
 - 4.2.3. Disaster Preparedness Training. Disaster preparedness and HAZMAT training are identified in chapter 6 of AFI 32-4001 and chapter 3 of AFI 32-4002 respectively.
- **4.3. Exercises.** Conduct exercises to measure the effectiveness of the unit's command and control structure, contingency support vehicles and equipment, and the different CE contingency response training programs. Practice responding to peacetime crises and to likely wartime scenarios. Wargaming exercises must realistically reflect local threat analysis (or expected deployment location threat analysis), just as peacetime exercises must be derived from plausible natural and man-made disasters, major accidents, or utility service disruptions. Exercises should range from simple tests of the pyramid personnel alerting system to the more complex responses required in major peacetime or wartime incidents. Conduct no-notice exercises for a valid test of the recovery force capability. Exercise the base sustaining force's capability in operating the base during different levels of conflict when some or all the BCE's mobility forces and equipment have deployed.
- **4.4. Training Projects.** Opportunities often exist for accomplishing special projects while conducting valuable contingency training. Prime BEEF forces will ensure all construction, maintenance, and repair activities meet with appropriate project programming requirements and approval levels. These restrictions apply to active, Air National Guard, and Air Force Reserve Prime BEEF forces.
 - 4.4.1. AF/ILE must approve any repair or unspecified minor military construction project planned for accomplishment with RED HORSE or Prime BEEF if total funded and unfunded cost exceed \$500,000. Funded cost of unspecified minor military construction projects cannot exceed \$500,000. AF/ILE's approval applies to projects in the United States, including Guam, Puerto Rico, and the Virgin Islands. The policy does not apply outside these geographic areas. Retain documentation for such projects totaling over \$100,000 at the installation.

4.4.2. Prime BEEF construction, maintenance, repair, or renovation projects in support of Morale, Welfare and Recreation facilities are not authorized when non-appropriated funds are the designated funding source.

EQUIPMENT AND SUPPLIES

- **5.1. Resource Requirements.** The BCE must have equipment and supplies readily available to cope with emergencies. Assess the types and quantities of resources required. The needed items are a function of the nature of the potential emergency (for example, enemy air or ground attacks, sabotage, equipment accidents, storms, floods, and strikes). Resource requirements also depend on the type of facilities, whether temporary or permanent, and the importance of immediate repair. CE units must:
 - 5.1.1. Keep equipment and vehicles operable, fueled, and designated for each contingency response team. Modify vehicles used for specified functions to protect operators and critical vehicle components to the maximum extent possible from identifiable threats.
 - 5.1.2. Identify substitute vehicles for CE contingency response teams to use in case the designated vehicles are not operable. In addition to vehicles and specialized equipment, identify available portable floodlights, taxiway or runway lights, and electric generators and ensure they are serviceable.
 - 5.1.3. Ensure adequate hand and portable tools, shovels, brooms, wrecking bars, and axes are available and note their locations in the CE contingency response plan.
 - 5.1.4. Ensure essential contingency materials and supplies are identified. After determining the types and quantities of required supplies, take action to make sure they are available, either as adjusted stock levels in base supply, special levels, normally available bench stock, or in bulk storage.
- **5.2. Special Equipment.** Although the equipment available for the day-to-day CE operation is adequate for most disasters, the base may obtain special equipment from other DoD installations in the area, from local contractors, or from other sources of supply. The CE contingency response plan should list specific contacts at other DoD installations, the types and quantities of equipment they possess, and the restrictions on their availability.
- **5.3. Protecting Equipment and Supplies.** The theater commander or installation commander specifies the need for dispersal. Dispersal may be warranted when certain potential emergencies such as enemy action, tornadoes, or hurricanes threaten the base. If used, identify dispersal locations in the appropriate CE contingency response plan annex.

REPORTS

- **6.1. Headquarters Reports.** During disaster recovery operations, the BCE must contribute information for reports to higher headquarters. The BCE provides the real property damage information and other civil engineering data necessary to develop the reports as specified by AFMAN 10-206, *Operational Reporting*. The base or wing command post sends these reports through the Air Force Operational Reporting System (AFOREP). The other information required by AFMAN 10-206 will be provided by representatives from other functional areas on base, such as base supply, transportation, and hospital. See AFI 32-4001 for disaster preparedness reporting requirements.
 - 6.1.1. RCS: HAF-XOO(AR)7118, *Operation Event and Incident Report (OPREP-3)*. Consult AFMAN 10-206 for reporting instructions. For events or incidents causing significant damage to Air Force installations, provide this supplementary information as a minimum:
 - 6.1.1.1. Report the extent of damage to structures; airfield pavements; navigational aids; utility systems; war reserve materiel (WRM) vehicles, equipment, or materials, including RRR and EOD assets; fire protection and crash rescue vehicles; and command, control, communications, and computer facilities and equipment.
 - 6.1.1.2. Report the status of support areas, such as housing and dining facilities, POL storage and distribution, and medical facilities.
 - 6.1.1.3. Provide remarks on restoration actions in progress or intended, estimated repair costs, and whether the repairs will be accomplished in-house or by contract; estimated recovery date and time; assistance required (for example, Prime BEEF forces and RED HORSE squadrons); and the impact on combat readiness status of Prime BEEF mobility forces.
 - 6.1.2. RCS: HAF-LGS(AR)7108, *Petroleum Damage/Deficiency Report (REPOL)*. The BCE works closely with the fuels management officer to determine work arounds, in-commission times, and other factors for damage to installed fuels facilities. The REPOL must realistically and accurately assess the operational capabilities of the base's fuel storage and distribution system.
 - 6.1.3. RCS: HAF-CE(AR)9355, EOD Report. Consult AFI 32-3001 for reporting instructions. The emergency status of this report is category level two (C-2) and requires normal reporting during emergency conditions.
- **6.2. Project Documentation Reports.** The BCE must also submit other reports.
 - 6.2.1. For reconstruction projects, obtain information required for project documents as soon as possible after the disaster. Obtain photos of the damage immediately after the disaster.
 - 6.2.2. To maintain a record of costs, prepare a work order, AF Form 332, Base Civil Engineer Work Request, and charge all CE expenditures to it.

6.2.3. Expenses that the base incurs in aiding off-base agencies in a natural disaster recovery operation may require reimbursement to the Government. To preclude difficulties in paying these expenses, maintain accurate cost records.

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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

Terms

Air Force Civil Engineer Support Agency (AFCESA)—A field operating agency located at Tyndall AFB, Florida. The Directorate of Contingency Support (HQ AFESC/CEX) acts as the Air Force program manager for Civil Engineer (CE) Contingency Response Planning.

Air Reserve Components—All units, organizations, and members of the Air National Guard of the United States and the Air Force Reserve. (10 U.S.C. 261)

Bare Base—A base having minimum essential facilities to house, sustain, and support operations to include, if required, a stabilized runway, taxiways, and aircraft parking areas. A bare base must have a source of water that can be made potable. Other requirements to operate under bare base conditions form a necessary part of the force package deployed to the bare base. (JP 1-02)

Base Civil Engineer Readiness Flight—The office of primary responsibility for all activities and measures the installation designs or takes to protect Air Force resources from the effects of attacks, natural disasters, and major accidents; to restore primary mission assets after disasters; and to fulfill the humanitarian disaster relief responsibilities of commanders.

Base Denial—Removal of resources from a threatened area, rendering unusable by the removal of parts, contamination (other than by nuclear, biological, or chemical means), immobilization, or partial or total destruction of military equipment or supplies or infrastructure.

Base Recovery After Attack (BRAAT)—A theater concept of recovering a base after conventional attack when restoring flying operations is the first priority. The installation may concurrently conduct other recovery activities, but only if these activities do not impede the effort to resume flying operations.

Camouflage, Concealment, and Deception (CCD)—Using concealment, disguise, and decoys to minimize detection or identification of troops, material, equipment, and installations. It includes taking advantage of the natural environment, as well as applying natural and artificial materials.

Continental United States (CONUS)—United States territory, including the adjacent territorial waters, located within North America between Canada and Mexico.

Contingency—An emergency involving military forces caused by natural disasters, terrorists, subversives, or by required military operations. Due to the uncertainty of the situation, contingencies require plans, rapid response, and special procedures to ensure the safety and readiness of personnel, installations, and equipment. (JP 1-02)

Contingency Response Plan (CRP)—The plan of action the Base Civil Engineer develops to prepare for and respond to all types of contingencies, emergencies, and disasters.

CONUS Sustaining Forces (CSF)—Personnel who maintain and operate essential facilities in support of continental United States wartime operations. (Joint Publication 1-02)

Damage Assessment and Response Team (DART)—Base Civil Engineer teams responsible for utility and facility damage assessment and isolating and safing damaged utility systems. A DART is assigned to the damage control center.

Damage Control Center (DCC)—The operations center established by the base civil engineer (BCE) to

control and conduct rapid runway repair and other postattack recovery operations with BCE forces. The DCC usually is headed by the BCE operations chief and staffed with appropriate BCE personnel.

Disaster Response Force (DRF)—The organization that the installation commander uses to command, control, and support disaster response operations. The DRF is composed of the Disaster Control Group, Command Post, Survival Recovery Center, Contingency Support Staff, Control Centers, and specialized teams.

Emergency Repair of War Damage—The least amount of immediate repair to damaged facilities necessary to accomplish the mission. Personnel make repairs using expedient materials and methods (such as AM-2 aluminum matting, cold-mix asphalt, plywood scabs, temporary utility lines, emergency generators) and modular or kit-type facility substitutes if they can't make full repairs in time to meet mission requirements.

Explosive Ordnance Disposal (EOD)—The detection, identification, on-site evaluation, rendering-safe, recovery, and final disposal of unexploded explosive ordnance. It may also include explosive ordnance which has become hazardous by damage or deterioration. (JP 1-02)

Follow-on War Damage Repairs—Repairs beyond those required during emergency repair operations intended to restore operational capability according to regulating standards of construction. This includes repair and restoration of pavement surfaces and facilities using, to the maximum extent possible, materials similar to those of the original construction For severely damages facilities (those essentially destroyed), restoration may require reconstruction *NOTE:* Follow-on war damage repairs are an Army responsibility by Department of Defense directive; however, host nation support forces also may be used, when available.

Individual Mobilization Augmentee (IMA)—An individual reservist attending drills who receives training and is preassigned to an active component organization, a Selective Service System, or a Federal Emergency Management Agency billet that must be filled on or shortly after mobilization. IMAs train on a part-time basis with these organizations to prepare for mobilization. Inactive duty training for IMAs is decided by component policy and can vary from 0 to 48 drills a year. (Joint Publication 1-01)

Minimum Operating Strip (MOS)—A runway which meets the minimum requirements for operating assigned and/or allocated aircraft types on a particular airfield at maximum or combat gross weight. (Joint Publication 1-02)

Rapid Runway Repair (RRR)—The process of using construction equipment, tools, portable equipment, expendable supplies, and temporary surfacing materials to provide a minimum operating surface through expedient repair methods. (AFM 11-1)

Survival Recovery Center (SRC)—A supplemental command post that is collocated with, or immediately adjacent, to the wing command post to direct base recovery activities to ensure expeditious resumption of flying operations after attack. The combat support group (CSG) commander directs operations of the SRC. The base civil engineer (BCE) is a member of the SRC staff, directing the activities of all base engineers, including firefighters, explosive ordnance disposal, and disaster preparedness personnel.

Unexploded Ordnance (UXO)—Explosive ordnance which has been primed, fused, armed or otherwise prepared for action, and which has been fired, dropped, launched, projected or placed in such a manner as to constitute a hazard to operations, installations, personnel or material and remains unexploded either by malfunction or design or for any other cause. (JP 1-02)

War Reserve Materiel (WRM)—Materiel required, in addition to mobility equipment and primary operating stock, to support wartime activities reflected in the US Air Force War and Mobilization Plan until the industrial base has generated sufficient deliveries to equal planned wartime consumption. (AFM 11-1)

Wing Operations Center (WOC)—The operations center through which the wing commander controls the assigned and attached wing forces. It consists of vertical communications capability, status boards, operational schedules, the people necessary to track activity, and the commander's battle staff to assist in operational and support decisions.

Attachment 2

STANDARD FORMAT AND ANNEXES FOR A CIVIL ENGINEER CONTINGENCY RESPONSE PLAN

- **A2.1. General.** The Civil Engineer (CE) Contingency Response Plan (CRP) should provide detailed guidelines, information, and direction to help CE personnel to respond to crises. Use the standard format in this attachment when preparing a new plan or revising an existing plan. Keep the plan workable by updating it periodically. When updating the plan, incorporate lessons learned from exercises, actual disasters, emergencies, crises, conflicts, contingencies, etc. As a minimum, the plan should support implementation of the Base OPLAN 32-1. AFPAM 10-219, volume 1, *Contingency and Disaster Planning* provides additional guidance and suggestions on preparing and packaging the Contingency Response Plan.
- **A2.2.** Plan Components. AFMAN 10-401, Operation Plan and Concept Plan Development and Implementation specifies eight components to a plan, but only three are generally necessary for the CRP: the table of contents, the basic plan, and the annexes with their appendixes and tabs.
- **A2.3.** The Basic Plan. The basic plan contains seven sections: references, task organization, situation, mission, execution, administration and logistics, and command and signal. Keep the basic plan brief. Save the details for the annexes.
 - **A2.3.1. References** . List plans, charts, maps, publications, or other documents needed to understand the plan.
 - **A2.3.2.** Task Organizations . Identify which elements of the command (CE squadron) are tasked to support this plan. Usually the entire CE squadron will have taskings in one or more contingencies.
 - **A2.3.3. Situation** . Briefly describe the most probable conditions for implementing the plan. Separately describe the enemy attacks, major accidents, or natural disasters which could threaten the base and any other contingencies which require CE support.
 - **A2.3.3.1. Supporting Forces** . List units or organizations outside of CE which support this plan. This includes augmenting Prime BEEF teams.
 - **A2.3.3.2. Assumptions** . Outline major planning assumptions. Only assumptions which make the plan unworkable if not true and which are beyond the capability of the CE unit (or installation) to control should be included.
 - **A2.3.4. Mission** . Outline the basic purpose of the plan. Briefly state the mission of the installation and the CE unit when the plan is implemented. Whether an Air Force station in the United States or a major overseas Air Force base, the CE mission is always the restoration or maintenance of the installation's capability to support its prime mission. The relief of human suffering and the protection of life and property are equally important missions which require civil engineer support. Be sure to include support provided to other services, nations, and civil authorities.
 - **A2.3.5.** Execution . Highlight the major tasks each flight or section must perform to carry out the plan and what major equipment will be available to the unit. This should include supporting forces added by operations plans or support agreements. Include details in the annexes to the plan.

- **A2.3.6. Administration and Logistics** . Tell how the civil engineers are to be supported and what support they must provide for themselves. In general terms, outline the sources for equipment and supplies and the support to be provided by others. Also list local support conditions which adversely affect plan implementation.
- **A2.3.7.** Command and Signal . Identify command relationships both external and internal to the CE unit. List CE control centers to be used and designate who commands the CE forces, control centers, and recovery teams. Outline the succession of command. The chain of command should be well defined for all people. State provisions for continuity of command. Include sufficient alternates for round-the-clock management for two manning scenarios: (1) full strength and (2) military personnel only (at overseas theater bases) or civilian personnel only (at CONUS bases). Overseas theater bases will also include provisions for command and control of augmenting forces, such as CONUS Prime BEEF teams. Such provisions should allow augmenting units to maintain unit integrity when practical, even though responsible to the host BCE. Outline methods of communications to be used.
- **A2.4. Annexes.** Prepare annexes in sufficient detail to guide CE preparations for and initial response to likely natural disasters, major accidents, war, and other contingencies or crises. There is no required format or content for annexes, appendixes, or tabs. If you do not need an annex, still list it in the table of contents with its corresponding letter but mark it "Not Used". Annexes T, U, V, and W are reserved for locally unique information which does not fit well into the other annexes. The letters "I" and "O" are not used as labels for annexes. To promote standardization and ease of use, the recommended annexes are:
- A--Major Peacetime Accident
- B--Natural Disaster
- C--Enemy Attack
- D--CE Support for Miscellaneous Plans/Situations
- E--Firefighting and Rescue Operations
- F--Deployment Preparations
- G--Contingency Environmental Considerations
- H--Facility Priority Listing
- J--CE Personnel Shelters
- K--Personnel Augmentation
- L--Equipment and Supplies
- M--Support Agreements and Contracts
- N--Base Utility Systems and Waste Disposal
- P--Airfield Pavements
- Q--Climatic and Geologic Factors
- R--Damage and Reimbursable Cost Documentation
- S--Maps and Charts
- **T--EOD Operations**

- U, V, W (Locally defined)
- X--Classified Annex (If required, published under separate cover)
- Z--Distribution
- **A2.5.** Classified Information. Write an unclassified plan when possible. If the plan must contain classified information, try to incorporate it in a separate classified annex. Be sure to mark the plan according to the AFMAN 10-401 instructions and add the security instructions component.